

What is claimed is:

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pl
1. A computer-implemented method of creating a video mosaic, comprising:
- 5 extracting individual frames of imagery taken from a video camera;  
identifying commonality from one individual frame to the next;  
overlapping the individual frames and displaying an image representing a continuous area.
2. The method of claim 1, wherein the video camera takes images at 30 frames per second.
3. The method of claim 2, wherein the images are stored in files in MPEG format.
4. The method of claim 3, comprising converting the MPEG files into black and white format.
5. The method of claim 1, comprising, for an individual frame, detecting an edge by detecting changes in intensity from one pixel to another and drawing a line at the detected edge.
6. The method of claim 1, comprising determining regions of interest.
7. The method of claim 6, comprising compensating for platform/camera motion.

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8. The method of claim 6, comprising:  
 searching frame for an edge;  
 following adjacent on pixels until an off pixel is detected;  
 counting a number of on pixels and if above a preset threshold, designate  
 5 as a structure;  
 repeat said searching said following and said counting steps until entire  
 image is structure detected.

9. The method of claim 8, comprising storing the location of on  
 pixels within each designated structure.

10. The method of claim 9, comprising changing value of pixels within  
 a designated structure to avoid use in future structures.

11. The method of claim 6, comprising correlating regions of interest  
 by comparing each region of interest to each other region of interest.

12. The method of claim 11, comprising:  
 calculating a centroid for each region of interest in a first frame;  
 comparing the centroid in the first frame with all centroids of next  
 adjacent frame;  
 5 select centroids in the next adjacent frame within an error tolerance;  
 correlating an average distance from every pixel in the first frame with  
 every pixel in corresponding structure in the next adjacent frame;  
 corresponding structure in the next adjacent frame;  
 if average distance is consistent between two corresponding structures in  
 10 the first frame.

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13. A computer architecture, comprising:

extracting means for extracting individual frames of imagery taken from a video camera;

5 identifying means for identifying commonality from one individual frame to the next;

overlapping means for overlapping the individual frames and displaying an image representing a continuous area.

14. An article, comprising:

at least one sequence of machine executable instructions;

5 a medium bearing the executable instructions in machine form, wherein execution of the instructions by one or more processors causes the one or more processors to:

extract individual frames of imagery taken from a video camera;

identify commonality from one individual frame to the next;

overlap the individual frames and displaying an image representing a continuous area.

15. A computer system, comprising:

a processor; and

5 a memory coupled to said processor, the memory having stored therein sequences of instructions, which, when executed by said processor, causes said processor to perform the steps of:

extracting individual frames of imagery taken from a video camera;

identifying commonality from one individual frame to the next;

overlapping the individual frames and displaying an image representing a continuous area.

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